

PATENT CLAIMS

1. A method of processing and packaging fillets, such as salmon fillets, wherein the fillets are fed on to a conveyor belt provided with a slicer for cutting the fillets into fillet slices, and wherein at least a camera and a calculation unit are arranged near the conveyor belt for imaging and calculating characteristic parameters of the fillet slices, **characterized in** that a weight determination of the fillet slices is performed, and, on the basis of the weight determination, the fillet slices are conveyed along the conveyor belt where they are moved to and transferred to a selected package tray of a plurality of package trays disposed opposite the conveyor belt, each package tray being placed on its own transport table, following which the selected transport tray with fillet slice on the transport table is weighed, and the result is applied to the calculation unit.
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- 15 2. A method according to claim 1, **characterized in** that the transport packages are weighed each time a fillet slice is supplied to it.
- 20 3. A method according to claim 1 or 2, **characterized in** that the weight determination of the fillet slices is determined as an estimate on the basis of the camera imaging of these.
- 25 4. A method according to claim 1 or 2, **characterized in** that the weight determination of the fillet slices is determined in that the entire fillet is weighed before it is cut in the slicer, and that the remaining part of the fillet is weighed after a fillet slice has been cut, following which the weight of the fillet slice is determined as a difference of the weighings of the fillet before it is cut and after it has been cut.
- 30 5. A method according to claims 1 – 5, **characterized in** that the camera performs a colour analysis and a geometrical determination of the circum-

ference of the fillet slice.

6. A method according to claim 5, **characterized in** that fillet slices having an attractive colour and geometry are placed on a package tray having a weight which means that the attractive fillet is placed as the last one on a package tray, said weight of the package tray after the placing of the attractive fillet being close to, but as little as possible above a desired minimum weight.

10 7. A method according to claims 1 – 6, **characterized in** that the camera is additionally used for estimating other characteristic parameters, such as area or shape.

15 8. A method according to claims 1 – 7, **characterized in** that the cutting of a fillet slice in the slicer from the same fillet is controlled on the basis of imaged and calculated characteristic parameters of a preceding fillet slice.

20 9. A system for processing fillets, such as salmon fillets, which are fed on to a conveyor belt equipped with at least a camera and a calculation unit as well as a slicer for cutting the fillets into fillet slices, **characterized in** that transport tables with package trays are arranged along the conveyor belt, and that each transport table is provided with a weighing cell.

25 10. A system according to claim 9, **characterized in** that a weighing cell is arranged below the slicer to weigh the fillets before each cutting process.

11. A system according to claims 9 and 10, **characterized in** that the conveyor belt is provided with spikes and a vertically extending surface.

30 12. A system according to claims 9 – 12, **characterized in** that the transport tables have horizontal surfaces, and that they are disposed opposite

the conveyor belt in positions where ejector means are arranged on the conveyor belt.